IN THE SPECIFICATION:

Please replace paragraph [23] with the following paragraph:

Figure 1 is a diagram of an environmentally hardened network, herein a NAN system 100, that integrates both data and power distribution function. A NAN Distribution box 101 contains a switch or, if enhanced, a router for connecting to a larger environmentally hardened ETHERNET network. It is assumed that there is a network operation center (NOC) (not shown) providing various network services via ETHERNET protocols. This distribution may be via fiber cabling 104, for example, The NAN fiber uplink cable 104 could also be part of a routed fiber loop running gigabit Ethernet or other high-speed fiber protocols. Distribution box 101 may be powered by AC power drop 102 that sources metered AC power (115/230V AC in the US) from a utility company service line or generator. Distribution box 101 supplies power and data through a cable 103 according to the invention to at least one distribution segment of the NAN, as illustrated. NAN cable 103 carries data and power to the uplink port of a switch 1 105 (such as an aerial enclosure or a buried enclosure) that in turn downlinks both power and data to the uplink port of a switch 2 111 as for example across a street or other right-of-way. Switch 1 105 also downlinks data through conventional outdoor CAT-5 to premises/homes 107 and 108. Switch 2 111 downlinks data through outdoor CAT-5 UTP cabling 110, 112 and 115 to premises 109, ~~103~~ 113 and 116. Premises 109 illustrates a conventional personal computer (PC) connection via direct connection to a conventional network interface card (NIC) to CAT-5 110. CAT-5 110 is operably installed from the aerial wiring into premises 109 to the room in which the PC is located. This represents a variety of premises network devices served by the NAN. Any of the premises represented diagrammatically by the "house" symbol can be any type of residential, commercial or industrial structure or enclosure containing network devices. Aerial switch 111 also downlinks data and power via NAN cable 117 to the uplink port of aerial switch 3 118.

Please replace paragraph [30] with the following paragraph:

Figure 3 provides a schematic of NAN cable ~~103~~ 108 (106, 114, 117, 129 or 135) according to the invention suitable for NAN requirements. Figure 4 is a cross-section of such a cable. The overall cable ~~103~~ 108 is covered with a heavy weather resistant outer sheath 415 outside a foil shield and drain wire 414, which provides EMI and electrostatic discharge protection. This permits the cable to be sown underground with a vibratory plow, pulled through buried conduit or lashed to aerial wiring systems. A removable strain cable 417 siamesed to the outer sheath by a sheath extension 415A provides for suspension and strain relief. A UTP cable 203 comprises at least four twisted pairs 401 through 408 (CAT-5 standard) and incorporates low loss electrical design to extend signal transmission range. A UTP insulating sheath 409 is also provided which increases environmental and mechanical robustness. DB-9 connector 301 and power connector 302 permit increased reliability and connection to network devices. The first port employs two twisted pairs that are color-coded. For example, a blue pair (wires 401 and 402) and a brown pair (wires 403[[-]] and 404) are connected to corresponding pins 1, 6, 2 and 7 of connector 301. An optional second port employs a green pair (wires 405 and 406) and an orange pair (wires 407 and 408) that are connected to corresponding pins 4, 8, 5 and 9 of connector 301. Each pair of wires supports transmission in one direction such that two pairs support a full duplex network connection. Providing four pairs permits the internal logic of a switch (204) to be configured by network managers to "trunk" the data of two ports together to double the data rate of a NAN connection. Alternatively, two independent network connections may be made through one connector (and one cable) or through two separate connectors and two separate cables.